CONTENTS

(Abstracts/Contents Lists published in Analytical Abstracts, ASCA, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Chromatography Abstracts, Current Contents/Physical, Chemical & Earth Sciences, Current Contents/Life Sciences, Deep Sea Research/Part B: Oceanographic Literature Review, Excerpta Medica, Index Medicus, Mass Spectrometry Bulletin, PASCAL-CNRS, Referativnyi Zhurnal and Science Citation Index)

Thermodynamic comparison of monomeric and polymeric C_{18} bonded phases using aqueous methanol and acetonitrile mobile phases
by A. M. Stalcup (Washington, DC and Gaithersburg, MD, U.S.A.), D. E. Martire (Washington, DC, U.S.A.) and S. A. Wise (Gaithersburg, MD, U.S.A.) (Received February 23rd, 1988) 1

Phase ratio determination in an ion-exchange column having pores partially accessible to proteins
by I. Mazsaroff and F. E. Regnier (West Lafayette, IN, U.S.A.) (Received January 26th, 1988) 15

Conformational studies of bovine alkaline phosphatase in hydrophobic interaction and size-exclusion chromatography with linear diode array and low-angle laser light scattering detection
by I. S. Krull and H. H. Stuting (Boston, MA, U.S.A.) and S. C. Krzysko (Winchester, MA, U.S.A.) (Received February 17th, 1988) 29

Separation of isomeric mono-, di- and tributylphenols by high-performance liquid chromatography on octadecylsilica with methanol–water using alkyl nitrile and alkylamine as surface modifiers
by P. Daučik, A. M. Rizzi and J. F. K. Huber (Vienna, Austria) (Received January 22nd, 1988) 53

Prediction of peptide retention times
by Y. Sakamoto, N. Kawakami and T. Sasagawa (Kanagawa, Japan) (Received February 18th, 1988) 69

Factors affecting the ion-pair chromatography of water-soluble vitamins
by M. W. Dong (Norwalk, CT, U.S.A.) and J. Lepore and T. Tarumoto (Pearl River, NY, U.S.A.) (Received March 8th, 1988) 81

Characterization of some styrene–divinylbenzene sorbents for reversed-phase chromatography
by S. Coppi, A. Betti and C. Bighi (Ferrara, Italy) and G. P. Cartoni and F. Coccioli (Rome, Italy) (Received February 19th, 1988) 97

Reversibility of solvent-induced surface modification of alumina adsorbents
by M. Todorović, M. M. Kopečni and J. J.Čomor (Belgrade, Yugoslavia) and R. J. Laub (San Diego, CA, U.S.A.) (Received March 1st, 1988) 105

Amperometric detector with a manganin electrode for microcolumn liquid chromatography
by K. Šlais (Brno, Czechoslovakia) (Received January 8th, 1988) 111

Simple microscale supercritical fluid extraction system and its application to gas chromatography–mass spectrometry of lemon peel oil
by K. Sugiyama (Yokohama, Japan) and M. Saito (Tokyo, Japan) (Received February 12th, 1988) 121

Capillary gas chromatography of steroidal alkaloids from Solanaceae. Retention indices and simultaneous flame ionization/nitrogen-specific detection
by W. M. J. van Gelder, H. H. Jonker, H. J. Huizing and J. J. C. Scheffer (Wageningen, The Netherlands) (Received January 22nd, 1988) 133

High-performance liquid chromatography of *s*-triazines and their degradation products using ultraviolet photometric and amperometric detection
by V. Pacáková, K. Štulík and M. Příhoda (Prague, Czechoslovakia) (Received February 22nd, 1988) 147

(Continued overleaf)

A cryotrap technique for the quantitation of monoterpenes in humid and ozone-rich forest air
by F. Jüttner (Tübingen, F.R.G.) (Received November 25th, 1987) 157

Determination of the chiral purity of dipeptide isosteres containing a reduced peptide bond by gas chromatographic analysis
by M. De Bondt, J. Couder, L. Van Der Auwera, M. Van Marsenille, M. Elseviers, N. Delaet, G. Laus, D. Tourwé and G. Van Binst (Brussels, Belgium) (Received February 25th, 1988) 165

Comparative high-performance liquid and gas–liquid chromatographic determination of phenolic glucosides in Salicaceae species
by B. Meier (Zürich, Switzerland), R. Julkunen-Tiitto and J. Tahvanainen (Joensuu, Finland) and O. Sticher (Zürich, Switzerland) (Received February 11th, 1988) 175

Characterisation of acid dyes in forensic fibre analysis by high-performance liquid chromatography using narrow-bore columns and diode array detection
by D. K. Laing, R. Gill, C. Blacklaws and H. M. Bickley (Reading, U.K.) (Received January 22nd, 1988) 187

1-(4-Hydroxyphenyl)-, 1-(2,4-dihydroxyphenyl)- and 1-(2,5-dihydroxyphenyl)-2-bromoethanones: new labels for determination of carboxylic acids by high-performance liquid chromatography with electrochemical and ultraviolet detection
by R. K. Munns, J. E. Roybal, W. Shimoda and J. A. Hurlbut (Denver, CO, U.S.A.) (Received February 2nd, 1988) 209

Cell separation by immunoaffinity partitioning with polyethylene glycol-modified Protein A in aqueous polymer two-phase systems
by L. J. Karr, J. M. Van Alstine, R. S. Snyder, S. G. Shafer and J. M. Harris (Huntsville, AL, U.S.A.) (Received February 15th, 1988) 219

Use of a small TSK GSW high-performance liquid chromatographic column for large-zone chromatographic studies of monomer–oligomer equilibria of membrane protein
by B. Vilsen and J. P. Andersen (Åarhus, Denmark) (Received October 12th, 1987) . . 229

Preparative isolation of ^{14}C-labelled saccharose from a partly purified fraction of *Chlorella vulgaris*
by J. Plicka, I. Kleinmann and V. Svoboda (Prague, Czechoslovakia) (Received February 15th, 1988) 237

Liquid chromatographic profiles of major carotenoid esters in commercially processed California Navel and Valencia orange juice concentrates
by T. Philip, T.-S. Chen and D. B. Nelson (Northridge, CA, U.S.A.) (Received January 26th, 1988) 249

Detection by high-performance liquid chromatography of polyamines formed by clostridial putrefaction of caseins
by S. Karlsson, Z. G. Banhidi and A.-C. Albertsson (Stockholm, Sweden) (Received February 19th, 1988) 267

Use of high-performance liquid chromatography for the purification of antibodies and antibody conjugates and the study of antibody–antigen interactions
by P. Carty and R. O'Kennedy (Dublin, Ireland) (Received January 27th, 1988) 279

Formation of polychlorinated dibenzo-*p*-dioxins upon combustion of commercial textile products containing 2,4,4′-trichloro-2′-hydroxydiphenyl ether (Irgasan® DP300)
by A. Kanetoshi, H. Ogawa, E. Katsura, H. Kaneshima and T. Miura (Sapporo, Japan) (Received January 25th, 1988) 289

Microscale isolation technique for quantitative gas chromatography–mass spectrometry analysis of indole-3-acetic acid from cherry (*Prunus cerasus* L.)
by R. Baraldi (Bologna, Italy), K.-H. Chen (College Park, MD, U.S.A.) and J. D. Cohen (Beltsville, MD, U.S.A.) (Received February 15th, 1988) 301

Determination of [^{32}P]phosphoamino acids in protein hydrolysates by isocratic anion-exchange high-performance liquid chromatography
by M. C. McCroskey, J. R. Colca and J. D. Pearson (Kalamazoo, MI, U.S.A.) (Received January 18th, 1988) 307

Automatic headspace gas chromatographic method for the simultaneous determination of trichloroethylene and metabolites in blood and urine
by J. M. Christensen (Hellerup, Denmark), K. Rasmussen (Åarhus, Denmark) and B. Køppen (Copenhagen, Denmark) (Received October 28th, 1987) 317

Determination of trichloroethylene metabolites in rat liver homogenate using headspace gas chromatography
by B. Køppen and L. Dalgaard (Copenhagen, Denmark) and J. M. Christensen (Hellerup, Denmark) (Received October 28th, 1987) 325

High-performance liquid chromatographic determination of aryl N-methylcarbamate residues using post-column hydrolysis electrochemical detection
by R. T. Krause (Washington, DC, U.S.A.) (Received February 23rd, 1988) 333

Isolation and quantitation of cadmium-, zinc- and copper-metallothioneins by high-performance liquid chromatography–atomic absorption spectrometry
by H. van Beek and A. J. Baars (Lelystad, The Netherlands) (Received February 15th, 1988) 345

High-performance liquid chromatographic characterization of some medical plant extracts used in cosmetic formulas
by H. Schulz and G. Albroscheit (Holzminden, F.R.G.) (Received February 1st, 1988) . 353

Determination of low levels of phenothiazine sulphoxides in phenothiazine drug substances and formulations by thin-layer chromatography–second-derivative spectrofluorimetry
by E. O. Fadiran and A. G. Davidson (Glasgow, U.K.) (Received December 14th, 1987) 363

Notes

Host–guest complexation in capillary isotachophoresis. I. α-, β- and γ-cyclodextrins as complexing agents for the resolution of substituted benzoic acid isomers
by S. Fanali and M. Sinibaldi (Rome, Italy) (Received February 23rd, 1988) 371

Thin-layer separation of some dithia[3.3]phanes. II.
by P. Kuś (Katowice, Poland) (Received February 10th, 1988) 378

Chromatographic studies of metal complexes. I. Paper chromatography of cobalt(III) complexes
by R. K. Ray (Parganas, India) and G. B. Kauffman (Fresno, CA, U.S.A.) (Received March 8th, 1988) 381

Quantitation of total *versus* selected polychlorinated biphenyl congeners in marine biota samples
by C. Porte, D. Barceló and J. Albaigés (Barcelona, Spain) (Received March 14th, 1988) 386

High-performance liquid chromatography with on-line radioactivity monitoring for metabolic studies of 2- and 4-[^{14}C]aminobiphenyls
by S. D. Jatoe, M. Kajbaf and J. W. Gorrod (London, U.K.) (Received February 8th, 1988) 394

Preparative fractionation of oligoriboguanylates by anion-exchange chromatography on TSK DEAE-5PW
by H. Rockstroh, W. Wangler and Th. Ackermann (Freiburg, F.R.G.) (Received February 12th, 1988) 401

Liquid chromatographic determination of traces of phenols in air
by K. Kuwata and S. Tanaka (Osaka City, Japan) (Received February 17th, 1988) . . 407

Normal-phase high-performance liquid chromatography of carotenes
by S. H. Rhodes, A. G. Netting and B. V. Milborrow (Kensington, Australia) (Received March 7th, 1988) 412

(Continued overleaf)

Separation of N-(4-aminobenzoyl)-γ-oligo(L-glutamic acid)s on a thin-layer plate and their quantitation using fluorescamine
by E. Sikora (Warsaw, Poland) and L. Krzyżanowski and B. Rzeszotarska (Opole, Poland) (Received February 25th, 1988) 420

Micro-assay for sheep 11β-hydroxylase activity using high-performance liquid chromatography for steroid analysis
by P. Swart, P. C. Todres, A. C. Swart and K. J. Van Der Merwe (Stellenbosch, South Africa) (Received March 24th, 1988) 424

Preparative high-performance liquid chromatography of macrotetrolides
by M. Beran, J. Jizba, M. Blumauerová, J. Němeček, J. Novák and J. Zima (Prague, Czechoslovakia) and N. V. Kandybin and G. V. Samoukina (Leningrad-Pushkin, U.S.S.R.) (Received March 3rd, 1988) 431

High-performance liquid chromatographic method for the determination of 2-nitropropane in rat plasma
by H. J. G. M. Derks, A. van Heiningen, R. Klaassen and M. Olling (Bilthoven, The Netherlands) (Received February 29th, 1988) 436

Determination of flavin adenine dinucleotide in biological tissues by high-performance liquid chromatography with electrochemical detection
by C. Cann-Moisan, J. Caroff and E. Girin (Brest, France) (Received February 18th, 1988) 441

Picomole determination of 2,4-dimethoxyanilides of prostaglandins by high-performance liquid chromatography with electrochemical detection
by J. Knospe, D. Steinhilber, T. Herrmann and H. J. Roth (Tübingen, F.R.G.) (Received February 2nd, 1988) 444

Determination of carbaryl by high-performance liquid chromatography with electrochemical detection
by S. Kawai, K. Goto, K. Kano and T. Kubota (Gifu, Japan) (Received February 2nd, 1988) 451

Separation of hydroxyanthraquinone derivatives extracted from rheum with analytical high-speed counter-current chromatography
by T.-Y. Zhang, L. K. Pannell and Q.-L. Pu (Bethesda, MD, U.S.A.), D.-G. Cai (Shanghai, China) and Y. Ito (Bethesda, MD, U.S.A.) (Received March 21st, 1988) 455

Identification of thyrostatic drug residues in animal thyroids by high-performance thin-layer chromatography and fluorescence reaction detection
by G. Moretti, M. Amici, P. Cammarata and F. Fracassi (Rome, Italy) (Received January 29th, 1988) 459

Book Review

Macromolecular biorecognition, principles and methods (edited by I. Chaiken, E. Chiancone, A. Fontana and P. Neri) 464

Author Index 465

In articles with more than one author, the name of the author to whom correspondence should be addressed is indicated in the article heading by a 6-pointed asterisk (*)